

Review of the Monitoring Design for the Delta Regional Monitoring Program

Charge to the Independent Review Panel for the Final Review

May 15, 2017

Background/Purpose

The Delta Regional Monitoring Program (Delta RMP) was initiated by the Central Valley Regional Water Quality Control Board (Regional Water Board) to fulfill the need for a comprehensive effort to assess and track water quality constituents and their effects in the Delta. The long term goals of the program are to provide a scientific basis for water quality policy and to document the effectiveness of beneficial use protection and restoration efforts. Establishing the Delta RMP also reflects an increasing desire among water quality and resource managers throughout the state for more integrated information about patterns and trends in ambient conditions across watersheds and regions, as many stressors on beneficial uses are interrelated and must be addressed more holistically.

The Delta RMP is still in its early stages of development. Recent accomplishments include: completion of a special study for pathogens, near-completion of a two-year study on pesticides and toxicity, initiation of the first year of mercury monitoring, and ongoing analysis of existing nutrient data coordinated with other groups. Proposed nutrient and pesticide/toxicity workplans for the upcoming year should address identified data gaps and provide the information needed to design a robust monitoring program.

The purpose of this final review is to provide an independent and objective assessment of the Monitoring Design by an Independent Review Panel (IRP) sponsored by the Delta Science Program. This effort has involved an initial review that occurred in the summer of 2016, culminating in a September 2016 initial review report. The reviewers provided constructive comments that will improve the utility and relevance of the data collected by the Delta RMP. The Delta RMP Technical Advisory Committee (TAC), technical subcommittees, and the Steering Committee have thoroughly considered the recommendations and analysis in the initial review. The Delta RMP participants see the value in aligning the program with the recommendations of the IRP, and are moving forward with a phased approach. There is broad recognition that to fully implement the recommendations will require more synthesis of existing data, collection of additional data, and the application of a statistical approach in developing a well designed more comprehensive design that will support management actions.

The written response to the initial review by the IRP includes:

- 1) Cover letter written by the Steering Committee,
- 2) Detailed TAC and TAC subcommittee responses addressing specific comments provided by the IRP, and
- 3) Appendix that includes the current workplan for fiscal year 2017-18.

The fiscal year 2017-18 workplan is not a new Monitoring Design and should not be considered to fully address the comments of the IRP or to fully implement the Design. Rather, the 2017-18 workplan represents early implementation of changes that will help inform a re-design of the Monitoring Design scheduled for 2019-20.

The initial review involved comments from the IRP on the scientific quality of the 2015 Monitoring Design (please see initial charge [here](#)). We request that, for the final review, the IRP consider the above written response from the Steering Committee and TAC (numbers 1 and 2 above). The IRP should use the information provided to evaluate whether the initial recommendations the IRP provided are being adequately addressed and whether the implementation approach sets the Delta RMP on the right path to an effective and robust program. It is requested that the IRP also consider the appended workplan for 2017-18 (number 3 above); specifically whether the panel feels the proposed workplan for fiscal year 2017-18 is a reasonable first step in beginning to address the IRPs recommendations and provide any guidance that will improve the monitoring design.

Charge to the Independent Review Panel – Final Review

In light of the new information presented in our response to the Initial Review and the appended 2017-18 workplan , the ISP is asked to address the following questions in its Final Review:

1. How adequately and appropriately were the Initial Review comments interpreted?
2. If we follow through on the actions we describe in our response, will the Delta RMP be on a path to successfully making strong linkages between the monitoring design and management decisions?
3. Will the proposed approach to incorporate additional statistical expertise be sufficient to guide the Program going forward?

The IRP will:

- 1) Review the new materials provided.
- 2) Participate in a half-day meeting to hear presentations about Delta RMP's written response to ask clarifying questions, and to evaluate the overall responses of the Delta RMP.
- 3) Provide a written response to the questions highlighted above.

Materials for Final Review

1. Response to initial review – cover letter.
2. Response to Review Panel Comments from the Technical Advisory Committee (and subcommittees).
3. Table showing the intersection of Delta RMP management and assessment questions with priority management drivers.
4. Appendix: Fiscal Year 2017-2018 Work Plan